Amdt. dated January 31, 2007

Reply to Office Action of October 31, 2006

Docket No. CH9-2000-0004 (246)

## **Amendments to the Claims:**

Applicants respectfully request that the following listing of claims be entered in lieu of all prior versions and listings of claims in the instant application:

## **Listing of Claims:**

- 1. (Currently Amended) In a speech recognition system, a method of speech recognition comprising:
- (a) receiving random non-voice input in a computer system communicatively linked to the speech recognition system, said input having been sent to a user from a different user and comprising at least one of text contained in an e-mail sent or received by [[a]] the user, information in a document attached to an e-mail sent or received by the user, information in a document viewed by the user on a display of the computer system, information in a plurality of linked documents accessible to the computer system, information in a spread sheet executing on the computer system, facsimile information received via a facsimile device connected to the computer system, call center information received via calling device connected to the computer system, and information recorded by a web browser executing on the computer system;
- (b) creating a word list defining a context-enhanced database based upon said input or modifying an existing context-enhanced database by adding a word list created based upon said input, wherein said created and modified context-enhanced databases are dynamically generated based upon at least one of a current activity performed by the user on the computer system and a past activity performed by the user on the computer system within a predetermined time interval, said current and past activities comprising at least one of sending or receiving an e-mail, displaying a document contained in an e-mail, displaying information contained in a spread sheet executing on the computer system, receiving facsimile information via a facsimile device connected to the computer system,

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receiving call center information via a calling device connected to the computer system, and receiving information recorded by a web browser executing on the computer system;

- (c) preparing a first textual output from the speech signal by performing a speech recognition task to convert a speech signal into said first textual output, wherein said context-enhanced database is accessed to improve the speech recognition rate, wherein said speech signal is parsed into a plurality of computer processable speech segments, wherein said first textual output comprises a plurality of text segments, each corresponding to one of the computer processable speech segments, and wherein selective ones of the text segments are generated by matching a computer processable speech segment against an entry within the context-enhanced database, said context-enhanced database including a plurality of entries, each entry comprising a speech utterance and a corresponding textual segment for the speech utterance;
- (d) enabling editing of said first textual output to generate a final voice-generated output; and
  - (e) making said final voice-generated output available.
- 2. (Previously Presented) The method of claim 1, wherein each of said computer-processable speech segments represent digitally encoded spoken words, and wherein each of the text segments is a word in text format.
- 3. (Previously Presented) The method of claim 1, wherein during said speech recognition task, said speech signals are analyzed to determine whether matches exist within the context-enhanced database for the computer-processable speech segments before another database is searched to locate text matches for the computer-processable speech segments.

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4. (Previously Presented) The method of claim 2, wherein during said speech

recognition task, said speech signals are analyzed to determine whether matches exist

within the context-enhanced database for the computer-processable speech segments

before another database is searched to locate text matches for the computer-processable

speech segments.

5. (Previously Presented) The method of claim 2, wherein a second database is

accessed to find a matching word for each of said words for which no matching word was

found in said context-enhanced database, wherein the context-enhanced database is

created from said input and from entries within the second database.

6. (Previously Presented) The method of claim 1, wherein at least two steps

selected from the group consisting of steps (b), (c), (d), and (e), are performed

concurrently.

7. (Previously Presented) The method of claim 1, wherein said speech utterances

and said textual segments of said context enhanced database represent words.

8. (Previously Presented) The method of claim 1, wherein said speech signal is

interpreted as part of said speech recognition task in light of entries included in said

context-enhanced database.

9.-10. (Cancelled)

11. (Previously Presented) The method of claim 1, wherein the creating step

further comprises the step of:

creating the context-enhanced database from those entries of a context-independent database having words included within the word list.

- 12. (Original) The method of claim 1, wherein said voice-generated output is a physical output.
- 13. (Original) The method of claim 12, wherein said voice-generated output is temporarily put into a memory.
- 14. (Previously Presented) The method of claim 1, wherein said editing is enabled by highlighting words of said first textual output having a predetermined likelihood of misinterpretation of said speech signal.
- 15. (Original) The method of claim 1, wherein said context-enhanced database is derived from an existing database based upon said input.
- 16. (Previously Presented) The method of claim 1, wherein said context-enhanced database is dynamically generated specifically for the specified context, wherein the method further comprises the step of:

detecting an event signifying the context has changed; and responsively updating said context-enhanced database.

17. (Previously Presented) The method of claim 1, further comprising the steps of:

automatically detecting a change in one or more active applications; responsive to the detected change, automatically deriving new input; and

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responsive to the new input, dynamically updating the context-dependant database

based upon the new input.

18. (Original) The method of claim 1, wherein one or more of a synonym lexicon

and a meaning variants database is accessed when preparing said voice-generated output.

19-45. (Cancelled)

46. (Currently Amended) A machine-readable storage, having stored thereon a

computer program having a plurality of code sections executable by a machine for

causing the machine to perform the steps of:

(a) receiving random non-voice input in a computer system communicatively

linked to the speech recognition system, said input having been sent to a user from a

different user and comprising at least one of text contained in an e-mail sent or received

by [[a]] the user, information in a document attached to an e-mail sent or received by the

user, information in a document viewed by the user on a display of the computer system,

information in a plurality of linked documents accessible to the computer system,

information in a spread sheet executing on the computer system, facsimile information

received via a facsimile device connected to the computer system, call center information

received via calling device connected to the computer system, and information recorded

by a web browser executing on the computer system;

(b) creating a word list defining a context-enhanced database based upon said

input or modifying an existing context-enhanced database by adding a word list created

based upon said input, wherein said created and modified context-enhanced databases are

dynamically generated based upon at least one of a current activity performed by the user

on the computer system and a past activity performed by the user on the computer system

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within a predetermined time interval, said current and past activities comprising at least

one of sending or receiving an e-mail, displaying a document contained in an e-mail,

displaying information contained in a spread sheet executing on the computer system,

receiving facsimile information via a facsimile device connected to the computer system,

receiving call center information via a calling device connected to the computer system,

and receiving information recorded by a web browser executing on the computer system;

(c) preparing a first textual output from a speech signal by performing a speech

recognition task to convert said speech signal into said first textual output, wherein said

context-enhanced database is accessed to improve the speech recognition rate, wherein

said speech signal is parsed into a plurality of computer processable speech segments,

wherein said first textual output comprises a plurality of text segments, each

corresponding to one of the computer processable speech segments, and wherein

selective ones of the text segments are generated by matching a computer processable

speech segment against an entry within the context-enhanced database, said context-

enhanced database including a plurality of entries, each entry comprising a speech

utterance and a corresponding textual segment for the speech utterance;

(d) enabling editing of said first textual output to generate a final voice-

generated output; and

(e) making said final voice-generated output available.

47. (Previously Presented) The machine-readable storage of claim 46, wherein

each of said computer-processable speech segments represent digitally encoded spoken

words, and wherein each of the text segments is a word in text format.

48. (Previously Presented) The machine-readable storage of claim 46, wherein

during said speech recognition task, said speech signals are analyzed to determine

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whether matches exist within the context-enhanced database for the computer-

processable speech segments before another database is searched to locate text matches

for the computer-processable speech segments.

49. (Previously Presented) The method of claim 47, wherein during said speech

recognition task, said speech signals are analyzed to determine whether matches exist

within the context-enhanced database for the computer-processable speech segments

before another database is searched to locate text matches for the computer-processable

speech segments.

50. (Previously Presented) The method of claim 47, wherein a second database is

accessed to find a matching word for each of said words for which no matching word was

found in said context-enhanced database, wherein the context-enhanced database is

created from said input and from entries within the second database.

51. (Previously Presented) The machine-readable storage of claim 46, wherein at

least two steps selected from the group consisting of steps (b), (c), (d), and (e), are

performed concurrently.

52. (Previously Presented) The machine-readable storage of claim 46, wherein

speech utterances and said textual segments of said context enhanced database represent

words.

53. (Previously Presented) The machine-readable storage of claim 46, wherein

said speech signal is interpreted as part of said speech recognition task in light of entries

included in said context-enhanced database.

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## 54.-55. (Cancelled)

56. (Previously Presented) The machine-readable storage of claim 46, wherein the creating step further comprises the step of:

creating the context-enhanced database from those entries of a context-independent database having words included within a word list.

- 57. (Original) The machine-readable storage of claim 46, wherein said voice-generated output is a physical output.
- 58. (Original) The method of claim 57, wherein said voice-generated output is temporarily put into a memory.
- 59. (Previously Presented) The machine-readable storage of claim 46, wherein said editing is enabled by highlighting words of said first textual output having a predetermined likelihood of misinterpretation of said speech signal.
- 60. (Original) The machine-readable storage of claim 46, wherein said contextenhanced database is derived from an existing database based upon said input.
- 61. (Previously Presented) The machine-readable storage of claim 46, wherein said context-enhanced database is dynamically generated specifically for the specified context, wherein the method further comprises the step of:

detecting an event signifying the context has changed; and responsively updating said context-enhanced database.

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62. (Previously Presented) The machine-readable storage of claim 46, further comprising the steps of:

automatically detecting a change in one or more active applications; responsive to the detected change, automatically deriving new input; and responsive to the new input, dynamically updating the context-dependant database based upon the new input.

- 63. (Original) The machine-readable storage of claim 46, wherein one or more of a synonym lexicon and a meaning variants database is accessed when preparing said voice-generated output.
- 64. (Currently Amended) In a speech recognition system, a method of speech recognition comprising the steps of:

receiving random non-voice input in a computer system communicatively linked to the speech recognition system, said input having been sent to a user from a different user and comprising at least one of text contained in an e-mail sent or received by [[a]] the user, information in a document attached to an e-mail sent or received by the user, information in a document viewed by the user on a display of the computer system, information in a plurality of linked documents accessible to the computer system, information in a spread sheet executing on the computer system, facsimile information received via a facsimile device connected to the computer system, call center information received via calling device connected to the computer system, and information recorded by a web browser executing on the computer system;

creating a word list defining a context-enhanced database based upon the input or modifying an existing context-enhanced database by adding a word list created based upon the input, wherein said created and modified context-enhanced databases are dynamically generated based upon at least one of a current activity performed by the user on the computer system and a past activity performed by the user on the computer system within a predetermined time interval, said current and past activities comprising at least one of sending or receiving an e-mail, displaying a document contained in an e-mail, displaying information contained in a spread sheet executing on the computer system, receiving facsimile information via a facsimile device connected to the computer system, and receiving information recorded by a web browser executing on the computer system;

parsing a received speech signal into a plurality of speech segments;

comparing said speech segments against entries in the context-enhanced database;

when matching entries are found in the comparing step, for each matching entry retrieving a textual segment from the context-enhanced database that is associated with the matching entry; and

generating textual output for the speech signal that includes the retrieved textual segments.

65. (Previously Presented) The method of claim 64, further comprising the steps of:

when matching entries are not found in the comparing step, generating a textual segment for the speech segment using a context-independent database, wherein the generated textual output includes the generated textual segments.

66. (Previously Presented) The method of claim 65, wherein entries within the context-enhanced database are a subset of entries contained within the context-

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independent database that are derived from the context-independent database and the input.

- 67.-68. (Cancelled)
- 69. (Previously Presented) The method of claim 64, wherein the creating step further comprises the step of:

creating the context-enhanced database from those entries of a context-independent database having words included within the word list.

70. (Previously Presented) The method of claim 64, further comprising the steps of:

automatically detecting a change in one or more active applications; responsive to the detected change, automatically deriving new input; and responsive to the new input, modifying the context-dependant database based upon the new input.

71. (Previously Presented) The method of claim 70, further comprising the step of: repeating the detecting step, the deriving step, and the modifying step of claim 70 to ensure the context-dependant database includes information for a current state of the active applications.